

SKYNEWS



DOMINION ASTROPHYSICAL OBSERVATORY AND THE I.S.S.

By W. John McDonald

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MEETING

Weds. June 11, 2014, 7:30 PM
University of Victoria
A104, Bob Wright Bldg.
3800 Finnerty Road

On The Cover

The International Space Station passes over the historic Plaskett Telescope on Sunday, June 1, 2014. John McDonald joined several others at our VCO that night before walking down to the main Observatory to take this stunning photo.

June Speaker

Our monthly meeting will be held on Wednesday, June 11th in Room A104 of the Bob Wright Centre, University of Victoria, at 7:30 PM.

Our speaker will be Don Moffatt, who has worked closely with the HIA. Don has agreed to speak to us about his plan to start a community group called “Friends of the DAO.”

Please join us for coffee and cookies in the Astronomy Lounge after the lecture, located on the fourth floor of the Elliott Building.

President’s Report

As I write this final report for this spring, we are on the cusp of what will be a summer to remember. Why? We are hosting GA 2014. We are hosting public night sky viewing on Observatory Hill. And this in addition to the usual star party and a signature outreach event.

Our hosting of GA 2014 at the University of Victoria is the culmination of the efforts of those too numerous to mention, at least here, headed up by Paul Schumacher and Mark Bohlman, Co-Chairs of the organizing committee. An early start, the selection of first-class committee heads and members, and spot-on organization has led to what promises to be a great success.

The reopening of Observatory Hill, at least for this summer, is a story of a different type. The closure of the Center of the Universe last summer was immediately followed what can only be called a public outcry, the involvement of an MLA, and a very successful online petition. This led to community involvement, meetings, committees and ultimately to Victoria Centre’s proposal to host public night sky viewing, and tours of the Plaskett, on seven evenings at the end of this summer. Victoria Centre enjoyed the encouragement and assistance of local NRC/Hertzberg staff throughout, with our effort being led with great determination, by Lauri Roche. Although the Plaskett will be operated this first summer by professional NRC staff, several of our number will be trained in the operation of the great instrument, hopefully to assume responsibility for its operation during future events.

The success of these events depends first and foremost on the participation of the members of Victoria Centre. I hope to see all of you this summer.

....*Nelson Walker*

Membership Report – June, 2014

Membership Activity

<u>New and Returning:</u>	3
<u>Renewed:</u>	8
<u>Upcoming Expiries:</u>	6
<u>Grace Period:</u>	8
<u>Total Membership:</u>	185

Liaisons: Nothing to report from Transport Canada, HIA, or the Plaskett. We are still hoping to hold UVic observing sessions as time permits. GA preparations are taking precedent....please bear with us!

....*Sherry Buttnor, 2nd Vice President*

Your Editor's Musings

“Ohhh, MAN !! Another plane !!” I said, as we targeted the sky up at the VCO a few weekends ago. “That must have been the 8th or 9th one tonight!”

So began our adventure on the night of Friday, May 23rd, up on the Hill. The weather forecast was going to be great – clear skies for an event that was billed, possibly - to be one of the finest meteor showers of the Century. My excitement was building as I replied to Michel’s invitation to join him – and others – to take in the Camelopardalids, away from the urban rush and brightness of the city.

My arms were loaded with my comfortable fold-up furniture items, as I made my way from the car to our Observatory’s pad. I wore a few layers of clothing, some gloves and that necessary toque to keep my head warm. I chose my newly-acquired pair of 15x70 binoculars instead of the 25x100 light-buckets. After all, we were going to draw on the rich show of meteors for half the night. Not much time for star-gazing !! This “Show of the Century” in the far-northern constellation of Camelopardalis had the potential of 1,000 meteors per hour, maximum....

Alas, we waited in vain. “Just one more hour”, I said, rubbing my cold hands. Reports from other meteor-hunters across North America would be just as grim....

Well, not all was totally lost. We did see three large streaks on the other side of the sky, far away from the Giraffe. There were a few tiny streaks over in the north around the Pole Star - enough to count on the fingers on one numb hand. I turned my chair around to the East. As I targeted the Coathanger cluster and other Messiers with my binos, I saw another overseas flight blinking its way to a Sea-Tac Airport approach. Most night flights are predictable; unfortunately, not a sky full of shooting stars.

We saw more planes than meteors that night. Rubbing the feeling back into my fingers and checking my watch, I made my way back to the car. I was still thankful for the clear, moonless night. Oh, what other similar stories we'll share at our General Assembly at the end of this month !!

Clear Skies. Hope to see you at the top of Observatory Hill later this summer.

....*Diane*

2014 Gruber Cosmology Prize Awarded to Sidney van den Bergh , Co-Recipient



It is with great pleasure that the Canadian Astronomical Society / Societe Canadienne d'Astronomie recognizes and applauds the selection of Dr. Sidney van den Bergh – Researcher Emeritus at NRC Herzberg Astronomy and Astrophysics, in Victoria, British Columbia – as a co-recipient of the 2014 Gruber Cosmology Prize, one of the world's most prestigious awards for astronomy. His co-recipients of the \$500,000 award are Profs. Jaan Einasto (Tartu Observatory, Estonia), Kenneth Freeman (Australian National University) and Brent Tully (University of Hawai'i).

Together they are recognized by the Gruber Foundation "...for their pioneering contributions to the understanding of the structure and composition of the nearby Universe. Their work laid the foundations of Near Field Cosmology. They clarified the properties of nearby galaxies — dwarfs, spirals, lenticulars and ellipticals — through studies of their morphology, stellar and gaseous content. The early recognition of the role of dark matter, and of the filamentary clustering of galaxies together with setting the distance scale of galaxies was crucial in setting the cosmological context for our current understanding of the evolution of galaxies and large-scale structure."

Dr. van den Bergh attended Leiden University, the Netherlands (1947 – 48), transferring on scholarship to receive his A.B. (Physics) from Princeton University in 1950, M.Sc. (Physics) from Ohio State University (1952) and his Dr. rer. nat. (Astronomy) at the University of Göttingen in 1956, followed by appointments at Ohio State University (1956-1958), University of Toronto (1958-1977) and the National Research Council (1978-1998), where he was Director of the Dominion Astrophysical Observatory (1978-1986). He became NRC Researcher Emeritus in 1999, a position he holds today.

"Over a career spanning more than six decades, Dr. van den Bergh has made a profound and lasting contribution to our understanding of galaxies." said Laura Ferrarese, CASCA President. "His vast volume of work on the age and size of the Universe, and on the physical mechanisms underlying the formation and evolution of galaxies, helped lay the foundation of "near field cosmology". It is a distinct pleasure to see this ground-breaking work recognized by the Gruber Foundation. "

Author of more than 500 refereed publications, there is hardly an area of contemporary astronomy on which Dr. Van den Bergh did not write an important paper. His pioneering research includes: the properties of variable stars and exploding stars and their application as 'standard candles' for

the extragalactic distance scale; the nature of the oldest stellar populations in the Milky Way and nearby galaxies, including their systems of star clusters as tools for unravelling the sequence of events in the formation of galaxies; discovering the first dwarf spheroidal companions of M31, the Andromeda Nebula; the morphological structure and stellar populations of galaxies as a function of distance and environment; the relationship between dwarf galaxies and more massive systems; and the properties of galaxy clusters in the low-redshift universe.

He also played a pivotal role in Canada's participation in the Canada-France-Hawaii Telescope, which became the most influential telescope of its size in the world. As DAO Director he provided exceptionally strong scientific leadership as it began transitioning to become a national centre for Canadian astronomy. He trained 28 students (and a comparable number of postdoctoral scholars) who themselves, and their students, continue to shape Canadian—and international—astronomy to this day.

An Officer of the Order of Canada, Dr. van den Bergh has received numerous honours and awards, including CASCA's Beals Prize, the NRC President's Medal for Science, Fellow of the Royal Society, Fellow of the Royal Society of Canada, AAS Russell Lecturer, Canada Council Killam Prize, Astronomical Society of the Pacific's Bruce Gold Medal, and election to the Canadian Science and Engineering Hall of Fame.

CASCA congratulates Dr. van den Bergh for this well earned recognition of his outstanding contributions to cosmology and to Canadian scientific excellence.

The Gruber Cosmology Prize honours a leading cosmologist, astronomer, astrophysicist or scientific philosopher for theoretical, analytical, conceptual or observational discoveries leading to fundamental advances in our understanding of the universe. The official Gruber Foundation Press Release can be found at: <http://gruber.yale.edu/cosmology/2014/sidney-van-den-bergh>

Vancouver Island Regional Science Fair – Victoria Centre's Award

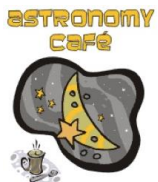
The Vancouver Island Regional Science Fair took place on April 13, 2014. This year's award from the Centre recognized a budding space engineer, Max Scott, a Grade 9 student who attends Glenlyon Norfolk School. His project is entitled "The Aerodynamic Principles of a Rocket." He designed, built, and flew rockets with different wing designs.

His experimental data (height and distance for multiple flights of each design) were carefully recorded, nicely presented in his poster and discussed. Unavoidably, his research is limited by the earth's atmosphere, but his ambition is to study engineering and ultimately "to design efficient rockets that could get to Mars - for example, in much shorter times than now possible." His ambition is to facilitate interplanetary travel for exploration and exploitation, not to become an astronaut himself (though he acknowledges that might change). Lauri Roche and Dorothy Paul, who were judges at the Science Fair, singled out Max's project as worthy of RASC recognition. Congratulations, Max!

Council for 2013 / 2014

Past President: Lauri Roche pastpres@victoria.rasc.ca
President: Nelson Walker president@victoria.rasc.ca
First Vice President: Charles Banville vp@victoria.rasc.ca
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Membership Coordinator: Sherry Buttner Membership@victoria.rasc.ca
Observing Chairperson: Bill Weir obschair@victoria.rasc.ca

Members at Large: Bill Almond, Jim Hesser, Alex Schmid, David Lee, Li-Ann Skibo, Paul Schumacher, Matt Watson



Astronomy Café: Held every Monday at Fairfield Community Centre - 1330 Fairfield Rd, Victoria, at 7:30pm to 10pm. **Please note that Astronomy Café is closed until Monday, September 8th.** Call Malcolm at (778) 430-4136 for directions and information. Newcomers are especially encouraged.



New Observers Group: Hosted by Sid Sidhu, 1642 Davies Road, Highlands. Please call (250) 391-0540 for information and directions.



Email Lists Observer / CU Volunteers / Members
Contact Matt Watson to subscribe. <mailto:admin@victoria.rasc.ca>

The next meeting is Wednesday, September 10, 2014, at 7:30 PM.